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**To:** [Dana Bayuk](#)  
**Cc:** [Patty Dost](#); [Rachel Melissa \(RMelissa@pearllegalgroup.com\)](#); [Sarah Riddle](#); [Ben Hung](#); [John Edwards](#); [Rob Ede](#); [Terry Driscoll \(b\) \(6\)](#); [Chip Byrd \(WByrd@sevenson.com\)](#); [Crystal Mike](#); [Joe Burke](#); [Review Data](#); [Ilene Gaekwad \(imunk@foleymansfield.com\)](#); [Sheldrake Sean](#); [Lance Peterson \(PetersonLE@cdmsmith.com\)](#); [JOHNSON Keith](#); [Bob Wyatt](#); [Dan Hailey](#); [LARSEN Henning](#); [LACEY David](#); [BURKHART Robert](#); [John Renda](#); [Jen Mott](#); [James Peale](#); [Kelly Titkemeier \(kittkemeier@maulfoster.com\)](#); [Madi Novak](#); [Mary Benzinger \(mbenzinger@maulfoster.com\)](#); ["Mike Murray"](#); [Myron Burr \(myron.burr@siltronic.com\)](#)  
**Subject:** RE: NW Natural, Detections of 1,2-Dichlorobenzene in the HC&C System  
**Date:** Friday, June 10, 2016 1:13:32 PM  
**Attachments:** [Table A-1 from HC&C PMP 2015-05-01.pdf](#)  
[Table 1 Pest-Herb-Doxin-Furan.pdf](#)

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Dana –

In your May 26, 2016 email you requested that NW Natural perform the following tasks:

1. Compile information for Rhone Poulenc constituents available from sampling the HC&C system, and lower Alluvium WBZ and deep lower Alluvium WBZ in the northern portion of the Siltronic Site and southern Gasco Site
2. Collect and analyze samples from PW-1L and the influent to the Siltronic pre-treatment facility for Rhone Poulenc constituents, including volatile organic compounds, semi-volatile organic compounds, organo-chlorine insecticides and chlorinated herbicides
3. Evaluate the detections of Rhone Poulenc constituents in the context of HC&C system operations, particularly at PW-1L.

NW Natural is not responsible for investigating or remediating contaminants in groundwater migrating from the Rhone-Poulenc facility or other off-site sources.

<http://www.deq.state.or.us/lq/pubs/docs/cu/OffSiteContaminantMigrationPolicy.pdf> Nonetheless, NW Natural is prepared to collect samples from PW-1L and the influent to the Siltronic pretreatment plant and to analyze those samples as requested as part of our routine groundwater monitoring program. The sample from the Siltronic pretreatment plant will be collected as a 24-hour composite sample. Samples from these two locations are already analyzed for VOCs and SVOCs. Table A-1 from the Sampling and Analysis Plan included in the Performance and Monitoring Plan (submitted to DEQ in May 2015; attached). Table A-1 shows the analyte list, analytical methods, and target reporting limits for VOCs and SVOCs that we currently follow. Organochlorine pesticides, chlorinated herbicides, and dioxins and furans will be added to the analytical list during the next scheduled monitoring event for extraction well PW-1L and the influent to the Siltronic pretreatment plant. Table 1 shows the analyte list, analytical methods, and target reporting limits for the organochlorine pesticides, chlorinated herbicides, and dioxins and furans. The analytical methods are summarized below.

- VOCs by EPA method 8260B
- SVOCs and PAHs by EPA method 8270C
- Organochlorine pesticides by EPA method 8081B
- Chlorinated herbicides by EPA method 8151A
- Dioxins and Furans by EPA method 8280A

Sampling of the extraction wells (including PW-1L) was planned for earlier this month, but is on hold

in anticipation of including the additional analyses described above. Likewise, sampling of the influent to the Siltronic pretreatment plant is also on hold until we have DEQ concurrence on the analytical methods. Presuming DEQ approves the methods identified above by June 22, 2016, samples will be collected the week of June 27, 2016.

As requested, the results of this sample collection effort for these two samples will be reported to DEQ within 60 days of receiving laboratory analytical results.

NW Natural will also compile existing monitoring data for the Rhone Poulenc constituents available from sampling the HC&C System and lower Alluvium WBZ and deep lower Alluvium WBZ in the northern portion of the Siltronic Site and southern Gasco Site and evaluate the detection of the Rhone Poulenc constituents in the context of HC&C system operations.

Please contact John Renda with any questions.

Thank you,  
Jen Mott ☺  
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**From:** BAYUK Dana [mailto:BAYUK.Dana@deq.state.or.us]  
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**Subject:** NW Natural, Detections of 1,2-Dichlorobenzene in the HC&C System

Good afternoon Bob.

DEQ reviewed the “1st Quarter Residual Package NW Natural Source Control Groundwater Treatment Facility” (1<sup>st</sup> Quarter Package) sent by e-mail on May 23, 2016. The 1<sup>st</sup> Quarter Package provides the results of collecting and analyzing samples of the following during January, February, and March 2016:

- Treatment system residuals (i.e., filter press cake and bag filter solids);
- Influent to, and effluent from the Siltronic and NW Natural pre-treatment facilities; and
- Influent to the Main Treatment Building.

Based on our review of the 1<sup>st</sup> Quarter Package and the results of groundwater monitoring data available through December 2015, DEQ observes that 1,2-dichlorobenzene (1,2-DCB) has been detected:

- At PW-1L on three occasions (March, September, and December 2015) at concentrations ranging from less than 1 microgram/liter (ug/L) to just above 6 ug/L;
- In the samples of influent to the Siltronic pre-treatment facility at concentrations between approximately 5 ug/L and just over 6 ug/L; and
- In the Main Treatment Plant influent at concentrations less than 1 ug/L.

The chemical, 1,2-DCB, is a constituent associated with the plume of groundwater contamination originating from the Rhone Poulenc site. The Rhone Poulenc groundwater plume is documented to occur in the northern portion the Siltronic Site in the deep portions of the lower Alluvium water-bearing zone (WBZ).

Although the concentrations of 1,2-DCB are low, the detections indicate there is the potential for extraction well PW-1L to be withdrawing other constituents occurring within the Rhone Poulenc groundwater plume. Based on this information DEQ believes further evaluation of this potential scenario is warranted.

DEQ requests that NW Natural further evaluate groundwater entering the HC&C system by:

- Compiling information for Rhone Poulenc constituents available from sampling the HC&C system, and lower Alluvium WBZ and deep lower Alluvium WBZ in the northern portion of the Siltronic Site and southern Gasco Site;
- Collecting and analyzing samples from PW-1L and the influent to the Siltronic pre-treatment facility for Rhone Poulenc constituents, including volatile organic compounds, semi-volatile organic compounds, organo-chlorine insecticides and chlorinated herbicides; and
- Evaluating the detections of Rhone Poulenc constituents in the context of HC&C system operations, particularly at PW-1L.

Prior to collecting samples from PW-1L and the influent to the Siltronic pre-treatment facility, DEQ requests that NW Natural provide a list of the laboratory analytical methods to be used for sample analysis on or before June 10<sup>th</sup>. DEQ further requests that sample collection and analysis occur as

soon as practicable after DEQ approves the analytical methods, and that NW Natural provide the information indicated above in a single submittal within 60-days of receiving the laboratory analytical reports.

Constituents from the Rhone Poulenc plume are not currently included in the HC&C system monitoring program and/or the system waste-stream determinations completed to date. The data compilation and the results of analyzing groundwater at PW-1L and the influent to the Siltronic pre-treatment system will be used to determine whether the HC&C system monitoring program and/or waste-stream determinations should be expanded to include Rhone Poulenc constituents. In addition, adjustments to the HC&C system may be considered based on the results of the operations review and sampling data.

DEQ acknowledges and appreciates the substantial amount of work NW Natural has completed related to the HC&C system, and considers our requests for the information above to be necessary for planning long-term operations.

Please feel free to contact me if you have questions.

Dana

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